

**REMARKS**

This is intended as a full and complete response to the Office Action dated December 28, 2005, having a shortened statutory period for response set to expire on March 28, 2006. Claims 1-7, 9-18, and 20-22 have been examined. The Examiner rejected claims 1, 3-5, 7, 9-12, 14-16, 18, and 20-22 under 35 U.S.C. § 102(b) as being anticipated by Ishimura (U.S. 5,602,672). The Examiner rejected claims 2 and 13 under 35 U.S.C. § 103(a) as being obvious over Ishimura in view of Roxlo (U.S. 4,863,245). The Examiner rejected claims 6 and 17 under 35 U.S.C. § 103(a) as being obvious over Ishimura.

***Claim Rejections Under 35 U.S.C. § 102(b)***

The Examiner rejected claims 1 and 10 as being anticipated by Ishimura. Applicants respectfully traverse the rejection.

According to MPEP 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Claims 1 and 10 include the limitations of (i) a modulator chip having a low impedance and an RF electrode and (ii) a microwave input chip having a thin film resistor for connecting an RF connector to the RF electrode of the modular chip, wherein the microwave input chip is configured to increase the total input impedance of the modulator. Ishimura fails to show a modular chip having a low impedance and an RF electrode. Rather, Ishimura merely shows a light modular "1" that is optically coupled with a laser, whereby the light modulator "1" modulates a laser light output from the laser in response to a high-frequency electrical signal supplied from a signal supply. (See Ishimura, col. 7, lines 10-14) In fact, Ishimura does not even mention a RF electrode. Furthermore, Ishimura fails to disclose a microwave input chip having a thin film resistor for connecting a RF connector to the RF electrode of the modular chip. In contrast, Ishimura merely shows a strip line "3" and a terminating resistor "5" mounted on a substrate "26", whereby an end of the resistor "5" is grounded and another end of the resistor "5" is connected to the strip line "3". Moreover, since the resistor "5" disclosed in Ishimura is not disposed between a RF connector and a RF electrode, the resistor "5" fails to increase the total input impedance of the modular, as recited in claims 1 and 10.

As the foregoing illustrates, Ishimura fails to teach or disclose all the limitations of claims 1 and 10. This failure precludes Ishimura from anticipating claims 1 and 10. Therefore, Applicant respectfully requests the 102(b) rejection of claims 1 and 10 be removed and allowance of the same. Additionally, claims 3-5, 7, 9, and 21 depend from claim 1 and claims 11-12, 14-16, 18, 20, and 22 depend from claim 10 and these claims are allowable for at least the same reasons as claims 1 and 10.

***Claim Rejections Under 35 U.S.C. § 103(a)***

The Examiner rejected claims 2 and 13 as being obvious over Ishimura in view of Roxlo. Applicants respectfully traverse the rejection. Claim 2 depends from claim 1 and claim 13 depends from claim 10. As set forth above, Ishimura fails to teach or suggest all the limitations in claims 1 and 10. Roxlo fails to cure the deficiency of Ishimura. For these reasons, the combination of Ishimura and Roxlo fails to render claims 2 and 13 obvious. Applicants therefore submit that claims 2 and 13 are in condition for allowance and respectfully request withdrawal of the § 103(a) rejection.

The Examiner rejected claims 6 and 17 as being obvious over Ishimura. Applicants respectfully traverse the rejection. Claim 6 depends from claim 1 and claim 17 depends from claim 10. As set forth above, Ishimura fails to teach or suggest all the limitations in claims 1 and 10. For this reason, Ishimura fails to render claims 6 and 17 obvious. Applicants, therefore submit that claims 6 and 17 are in condition for allowance and respectfully request withdrawal of the § 103(a) rejection.

PATENT  
Atty. Dkt. No. AVAN/001112***Conclusion***

Having addressed all issues set out in the office action, Applicants respectfully submit that the case is in condition for allowance. If the Examiner has any questions, please contact the Applicants' undersigned representative at the number provided below.

Respectfully submitted,



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